**AMENDMENTS TO THE CLAIMS:**

Please amend the claims as follows:

1. (Currently Amended) A charged particle beam device, comprising:

an emitter for emitting charged particles;

an aperture arrangement with at least one aperture for blocking a part of the emitted charged particles, ~~whereby~~ wherein the aperture arrangement forms a multi-area sub-beam charged particle beam with a cross-section-area and a cross-section-circumference, ~~whereby~~ wherein a ratio between the cross-section-circumference and the cross-section-area is increased by at least 15% as compared to the ratio between a cross-section-circumference and a cross-section-area of a circular beam with the same cross-section-area as the multi-area sub-beam charged particle beam; and

an objective lens for focusing the multi-area sub-beam, wherein the charged particle beam device, including the emitter, the aperture arrangement, a condenser lens, and a scan deflector, is adapted to focus the multi-area sub-beam charged particle beam onto the same location within the focal plane for generating a probe on the specimen being an image of a source, a virtual source, or a crossover.

2. (Currently Amended) The device according to claim 1, ~~whereby~~ wherein the ratio between the circumference of the cross-section and the cross-section-area is increased by at least 40% as compared to the ratio between the circumference of the cross-section and the cross-section-area of a circular beam with the same cross-section-area.

3. (Currently Amended) The device according to claim 1, ~~whereby~~ wherein the aperture arrangement with at least one aperture comprises at least two apertures, ~~whereby~~ wherein the multi-area sub-beam charged particle beam is provided as at least two independent charged particle beams.

4. (Currently Amended) The device according to claim 1, ~~whereby~~ wherein the aperture arrangement with at least one aperture forms a multi-area sub-beam charged particle beam with cross-like shape.

5. (Currently Amended) A charged particle beam device, comprising:

an emitter for emitting charged particles;

an aperture arrangement with at least one aperture for blocking a part of the emitted charged particles, ~~whereby~~ wherein the aperture arrangement forms a multi-area sub-beam charged particle beam with a cross-like shape; and

an objective lens for focusing the multi-area sub-beam charged particle beam with a cross-like shape, wherein the charged particle beam device, including the emitter, the aperture arrangement, a condenser lens, and a scan deflector, is adapted to focus the multi-area sub-beam ~~the at least two independent charged particle beams onto~~ the same location within the focal plane for generating a probe on the specimen being an image of a source, a virtual source, or a crossover.

6. (Currently Amended) The device according to claim 5, ~~whereby~~ wherein the multi-area sub-beam charged particle beam is provided with a 4-fold symmetry around an optical axis of the device.

7. (Currently Amended) The device according to claim 5, ~~whereby~~ wherein the aperture arrangement with at least one aperture comprises at least two apertures, ~~whereby~~ wherein the multi-area sub-beam charged particle beam is provided as at least two independent charged particle beams.

8. (Currently Amended) A charged particle beam device, comprising:

an emitter for emitting charged particles;

an aperture arrangement with at least one aperture for separating the emitted charged particles into at least two independent charged particle beams; and

an objective lens for focusing the at least two independent charged particle beams, wherein the charged particle beam device, including the emitter, the aperture arrangement, a condenser lens, and a scan deflector, is adapted to focus the at least two independent charged particle beams onto the same location within the focal plane for generating a probe on the specimen being an image of a source, a virtual source, or a crossover.

9. (Currently Amended) The device according to claim 8, ~~whereby~~ wherein the aperture arrangement forms a multi-area sub-beam charged particle beam with a cross-like shape.

10. (Currently Amended) The device according to claim 8, ~~whereby~~ wherein the emitter is a quasi spot-like emitter with a source diameter below 200 nm.

11. (Currently Amended) The device according to claim 8, ~~whereby~~ wherein the at least two independent charged particle beams have a distance (D) with respect to each other such that no interaction occurs between the at least two independent charged particle beams.

12. (Currently Amended) The device according to claim 8, ~~whereby~~ wherein the at least two independent charged particle beams have a distance (D) with respect to each other, ~~whereby~~ wherein the distance has about the same dimension as the diameter of the at least two apertures.

13. (Currently Amended) The device according to claim 8, ~~whereby~~ wherein the at least two apertures are formed by a segmented annular aperture.

14. (Currently Amended) The device according to claim 8, ~~whereby~~ wherein the at least two apertures have an elongated shape with a long axis and short axis,

~~whereby~~ wherein the long axis is arranged radially with respect to an optical axis of the charged particle beam device.

15. (Currently Amended) The device according to claim 8, ~~whereby~~ wherein the at least two apertures are arranged rotational-symmetrical to an optical axis of the charged particle beam device.

16. (Currently Amended) The device according to claim 8, ~~whereby~~ wherein the at least one aperture of the aperture arrangement has a 4-fold symmetry shape.

17. (Currently Amended) The device according to claim 8, ~~whereby~~ wherein the at least one aperture of the aperture arrangement has a cross-like shape.

18. (Currently Amended) The device according to claim 8, ~~whereby~~ wherein the at least one aperture of the aperture arrangement has a cross-like shape formed by four connected elongated apertures.

19. (Currently Amended) The device according to claim 8, ~~whereby~~ wherein the aperture arrangement comprises four apertures.

20. (Previously Presented) The device according to claim 8, further comprising a spherical aberration correction element.

21. (Previously Presented) The device according to claim 20, wherein the spherical aberration correction element is provided by an octopole element.

22. (Currently Amended) The device according to claim 8, ~~whereby~~ wherein the aperture arrangement is positioned between a source or virtual source and a charged particle beam lens positioned closest to the source.

23. (Currently Amended) The device according to claim 8, ~~whereby~~ wherein the aperture arrangement is integrated in an anode or in an extractor.

24. (Currently Amended) The device according to claim 8, further comprising:

a charged particle column length below 300 mm;

an optical system including the objective lens, ~~whereby~~ wherein the optical system is arranged such that no crossover is generated;

an accelerating means for increasing the charged particle energy while traveling through the charged particle device and a decelerating means for decreasing the charged particle energy for impingement on a specimen; or

a control means for interaction optimizing the at least two independent charged particle beams.

25. (Currently Amended) Method of operating a charged particle beam device, comprising:

illuminating an aperture arrangement with at least one aperture for blocking a part of the emitted charged particles, ~~whereby~~ wherein the aperture arrangement forms a multi-area sub-beam charged particle beam with a cross-section-area and a cross-section-circumference, ~~whereby~~ wherein a ratio between the cross-section-circumference and the cross-section-area is increased by at least 15% as compared to the ratio between a cross-section-circumference and a cross-section-area of a circular beam with the same cross-section-area as the multi-area sub-beam charged particle beam; and

focusing the multi-area sub-beam charged particle beam with an objective lens onto the same location of a specimen for generating a probe on the specimen being the image of a source, virtual source, or a crossover.

26. (Previously Presented) The method of operating a charged particle beam device according to claim 25, wherein the illuminating comprises:

generating at least two independent charged particle beams.

27. (Currently Amended) The method of operating a charged particle beam device according to claim 26, ~~whereby~~ wherein the at least two independent charged particle beams are generated on a circle around an optical axis of the charged particle device.

28. (Currently Amended) The method of operating a charged particle beam device according to claim 26, ~~whereby~~ wherein the at least two apertures are provided such that no significant interaction between the at least two independent charged particle beams occur.

29. (Currently Amended) The method of operating a charged particle beam device according to claim 25, ~~whereby~~ wherein the aperture arrangement is illuminated such that the at least one aperture is homogeneously illuminated.

30. (Previously Presented) The method of operating a charged particle beam device according to claim 25, further comprising:

interaction-optimizing each of the at least two independent charged particle beams.

31. (Currently Amended) The method of operating a charged particle beam device according to claim 25, ~~whereby~~ wherein the charged particles are energized to impinge on the specimen with an energy below 3 keV.

32. (Previously Presented) The method of operating a charged particle beam device according to claim 25, further comprising:

correcting spherical aberrations, which are introduced by guiding parts of the multi-area sub-beam charged particle beam off-axis.

33. (Currently Amended) The method of operating a charged particle beam device according to claim 25, further comprising:

detecting secondary and/or backscattered particles for imaging the specimen in a measurement; and

repeating imaging steps several times to generate a set of focus series measurements; and

generating a 3-dimensional image by superposing the set of focus series measurements.

34. (New) The device according to claim 25, wherein the beam current is 50 nA or higher.